ABSTRACT OF THE DISCLOSURE

An automated computer controlled apparatus includes a robotic assembly for capturing an electrophoresis gel and transferring the gel to a sequence of treatment stages. The robotic assembly has an articulated arm assembly for capturing a gel and moving the gel to a selected work station. The gels are supported by a carrier having magnetically biased clamping jaws. The robotic arm assembly is constructed to capture the carrier to manipulate the gel. The gel is suspended by the carrier in a manner to prevent tearing and stretching of the gel. The gel treating stations have tanks with surfaces to inhibit the gel from adhering to the walls of the tank. Typically, the surfaces of the walls have a plurality of channels formed by projections to allow the flow of liquid between the gel and the wall surface and reduce surface area of the wall contacting the gel. An agitating assembly reciprocates the gel in the tank to agitate the treating liquid. In one embodiment, an agitating plate moves in a reciprocating manner within the tank and is able to press the gel against a transparent wall of the tank at selected intervals so that an image of the gel can be captured at selected time intervals.